PCT

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A1

(43) International Publication Date:

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PCT/IB99/01354

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21. July 1998 (21.07.98)

GB

9824758.8

11 November 1998 (11.11.98)

(71) Applicant (for all designated States except US): DANISCO A/S [DK/DK]; Langebrogade 1, P.O. Box 17, DK-1001 Copenhagen K (DK).

(72) Inventor; and

(75) Inventor/Applicant (for US only): SØE, Jøm, Borch [DK/DK]; Orøvaenget 11, DK-8381 Mundelstrup (DK).

(74) Agents: HARDING, Charles, Thomas et al.; D. Young & Co., 21 New Fetter Lane, London EC4A 1DA (GB).

(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC. LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK. ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published

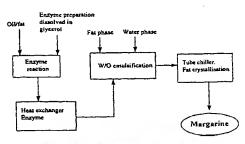
With international search report.

Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

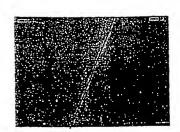
(54) Title: FOODSTUFF

(57) Abstract

There is provided use of a conversion agent to prepare from a food material a foodstuff comprising at least one functional ingredient, wherein the at least one functional ingredient has been generated from at least one constituent of the food material by the conversion agent.







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REQUEST

The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty.

For receiving office use only	
International Application No.	
International Filing Date	
Name of receiving Office and "PCT International Application"	

Applicant's or agent's file reference P005664WOCTH (if desired) (12 characters maximum) Box No. I TITLE OF INVENTION **FOODSTUFF** Box No. II **APPLICANT** Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (i.e. country) of residence if no State of residence is indicated below.) This person is also inventor. Telephone No. Danisco A/S Langebrogade 1 Facsimile No. PO Box 17 DK-1001 Copenhagen K Denmark Teleprinter No. State (i.e. country) of nationality: State (i.e. country) of residence: Denmark Denmark This person is applicant for all designated States except the the United States the States indicated in all designated the purposes of: United States of America States of America only the Supplemental Box Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S) Name and address: (Family name followed by given name; for a legal entity, full official designation. The This person is: address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (i.e. country) of residence if no State of residence is indicated below.) applicant only SØE, Jørn Borch Oroaenget 11 applicant and inventor DK-8381 Mundelstrup Denmark inventor only (if this check-box is marked, do not fill in below) State (i.e. country) of nationality: State (i.e. country) of residence: Denmark Denmark This person is applicant for all designated States except the the United States the States indicated in all designated of America only the purposes of: United States of America the Supplemental Box States Further applicant and/or (further) inventors are indicated on a continuation sheet AGENT OR COMMON REPRESENTATIVE; OR ADDRESS FOR CORRESPONDENCE Box No. IV The person identified below is hereby/has been appointed to act on behalf of √ agent common representative the applicant(s) before the competent International Authorities as: (Family name followed by given name; for a legal entity, full official designation. Name and address: Telephone No. The address must include postal code and name of country.) 023 8063 4816 HARDING, Charles Thomas Facsimile No. D Young & Co 023 8022 4262 21 New Fetter Lane London EC4A 1DA Teleprinter No. United Kingdom 477667 YOUNGS G Mark this check-box where no agent or common representative is/has been appointed and the space above is used instead to indicate a special address to which correspondence should be sent.

Box No. V									
The following	designations are hereby made under Rule 4.9(a) (mark the	е ар	plicab	le check-boxes; at least one must be marked):					
Regional Pat	ent								
√ √ AF	ARIPO Patent: GH Ghana, GM Gambia, KE Kenya, LS Lesotho, MW Malawi, SD Sudan, SZ Swaziland, UG Ugand Zimbabwe, and any other State which is a Contracting State of the Harare Protocol and of the PCT								
∑⁄ EA	Russian Federation, TJ Tajikistan, TM Turkmenistan, Convention and of the PCT	Eurasian Patent: AM Armenia, AZ Azerbaijan, BY Belarus, KG Kyrgyzstan, KZ Kazakhstan, MD Republic of Moldova, RU Russian Federation, TJ Tajikistan, TM Turkmenistan, and any other State which is a Contracting State of the Eurasian Pate							
√ 2 EF	December 50 Coming 51 Cintend 50 Errorce 68 Unite	אוא	וחממכ	erland and Liechtenstein, CY Cyprus, DE Germany, DK om, GR Greece, IE Ireland, IT Italy, LU Luxembourg, MC other State which is a Contracting State of the European Patent					
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National Pat	ent (if other kind of protection or treatment desired, specify on do								
AL AL	bania	V	LS	Lesotho					
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		, C	heck	-boxes reserved for designating States (for the purposes of a					
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Precautionary Designation Statement: In addition to the designations made above, the applicant also makes under Rule 4.9(b) all other designations which would be permitted under the PCT except any designation(s) indicated in the Supplemental Box as being excluded from the scope of this statement. The applicant declares that those additional designations are subject to confirmation and that any designation which is not confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant at the expiration of that time limit. (Confirmation of a designation consists of the filing of a notice specifying that designation and the payment of the designation and confirmation fees. Confirmation must reach the receiving Office within the 15-month time limit.)

Supplemental Box

If the Supplemental Box is not used, this sheet need not be included in the request.

Use this box in the following cases:

1. If, in any of the Boxes, the space is insufficient to furnish all the information:

in particular:

 (i) if more than two persons are involved as applicants and/or inventors and no "continuation sheet" is available;

(ii) if: in Box No. If or in any of the sub-boxes of Box No. III, the indication "the States indicated in the Supplemental Box" is checked:

(iii) if, in Box No. II or in any of the sub-boxes of Box No. III, the inventor or the inventor/applicant is not inventor for the purposes of all designated States or for the purposes of the United States of America:

(iv) if, in addition to the agent(s) indicated in 3ox No. IV, there are further agents:

(v) if, in Box No. V, the name of any State (or OAPI) is accompanied by the indication "patent of addition," or "certificate of addition," or if, in Box No. V, the name of the United States f America is accompanied by an indication "Continuation" or "Continuation-in-part":

(vi) if there are more than three earlier applications whose priority is claimed;

 If the applicant claims, in respect of any designated Office, the benefits of provisions of the national law concerning non-prejudicial disclosures or exceptions to lack of novelty: in such case, write "Continuation of Box No. ..." [indicate the number of the Box] and furnish the information in the same manner as required according to the captions of the Box in which the space was insufficient;

in such case, write "Continuation of Box No. III" and indicate for each additional person the same type of information as required in Box No. III. The country of the address indicated in this Box is the applicant's State (i.e. country) of residence if no State of residence is indicated below:

in such case, write "Continuation of Box No. II" or "Continuation of Box No. III" or "Continuation of Boxes No. II and III" (as the case may be), indicate the name of the applicant(s) involved and, next to (each) such name, State(s) (and/or, where applicable, ARIPO, Eurasian, European or OAPI patent) for the purposes of which the named person is applicant;

in such case, write "Continuation of Box No. II" or "Continuation of Box No. III" or "Continuation of Boxes No. II and III" (as the case may be), indicate the name of the inventor(s) and, next to (each) such name. State(s) (and/or, where applicable, ARIPO, Eurasian, European or OAPI patent) for the purposes of which the named person is inventor;

in such case, write "Continuation of Box No. IV and indicate for each further agent the same type of information as required in Box No. IV;

in such case, write "Continuation of Box No. V" and the name of each State involved (or OAPI), and after the name of each such State (or OAPI), the number of the parent title or parent application and the date of grant of the parent title or filing of the parent application;

in such case, write "Continuation of Box No. VI" and indicate for each additional earlier application the same type of information as required in Box No. VI.

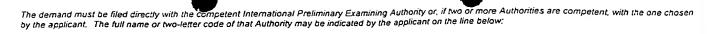
in such case, write "Statement Concerning Non-Prejudicial Disclosures or Exceptions to Lack of Novelty" and furnish that statement below.

CONTINUATION OF BOX IV - ADDITIONAL REPRESENTATIVES

PURVIS, William Michael Cameron COTTER, Ivan John PILCH, Adam Johyn Michael CRISP, David Norman ROBINSON, Nigel Alexander Julian HARRIS, Ian Richard TURNER. James Arthur MASCHIO, Antonio-MALLALIEU, Catherine Louise PRICE, Paul Anthony King PRATT, Richard Wilson HOLMES, Miles Keeton HORNER, David NACHSHEN, Neil POTTER, Julian Mark HAINES, Miles

PCT / IF

Box No. VI PRIORITY	CLAIM	Further p	riority claims are indicated	in the Supplemental Box
The priority of the following earlier	r application(s) is hereby c	laimed:		
Filing Date		v	Vhere earlier application is:	:
of earlier application (day/month/year)	Number of earlier application	national application: country	country regional Office	
item (1) 44 (21 Jul 1998) 21 July 1998 (21/7/1998)	9815905.6	[bk] A GBAA		
item (2) [11 Nov 1998] (11/11/1998)	9824758.8	(UK) A GBAA		
item (3)				
the earlier application(s) (only present international application	y if the earlier application viton is the receiving Office)	identified above as item(s):	for the purposes of the	to the Paris Convention for
* Where the earlier application is an Al the Protection of Industrial Property for	which that earlier application	was filed (Rule 4.10(b)(ii)). See Su	pplemental Box.	To the Fand deliverse
Box No. VII INTERNAT	IONAL SEARCHING	AUTHORITY		
Choice of International Searching (If two or more International Searching competent to carry out the international Authority chosen; the two-letter code m ISA / EPO	Authorities are sear search, indicate the Auti ay be used):	quest to use results of earlier rch has been carried out by or hority): Date (day/month/year)	requested from the Interna	t search (if an earlier ational Searching untry (or regional Office):
	T; LANGUAGE OF	FILING		
This international application conta		nal application is accompanied	by the item(s) marked belo	ow:
following number of sheets:			•	
request :	4	culation sheet		
description (excluding		te signed power of attorney f general power of attorney; ref	ference number if any:	
sequence listing part)		-		
claims :	1	ent explaining lack of signature		
abstract :		documents(s) identified in Box		,
drawings :	6. translat	tion of international application	into (language):	
sequence listing part of description	0 7. separa	te indications concerning depo	sited microorganism or oth	ner biological material
lotal number of	45	tide and/or amino acid sequen	ce listing in computer read	able form
Figure of the drawings which	9. V other (s	anguage of filing of the	English	
should accompany the abstract:	i.	nternational application:		
	E OF APPLICANT O			
Next to each signature, indicate the nan	ne of the person signing and ti	he capacity in which the person sig	ns (if such capacity is not obvi	ous from reading the request
Offle	3			
HARDING, Charles Thomas				
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 Date of actual receipt of the printernational application: 		99 /20 0	7 99/	2. Drawings:
Corrected date of actual receiptimely received papers or draw the purported international approximation.	vings completing		/	received:
Date of timely receipt of the re corrections under PCT Article				not received:
International Searching Author specified by the applicant:	rity ISA /	6. 🄀 Transmit until sear	tal of search copy delayed rch fee paid	
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Date of receipt of the record copy the International Bureau:		•		



IPEAV EPO



CHAPTER II

under Article 31 of the Patent Cooperation Treaty:

The undersigned requests that the international application specified below be the subject of international preliminary examination according to the Patent Cooperation Treaty and hereby elects all eligible States (except where otherwise indicated).

	F	or International Preliminary 8	Examining Authority us	se only				
entification of IF	PEA	Date of receipt of DEMAND						
Box No. I	IDENTIFICATION OF	THE INTERNATIONAL	APPLICATION	Applicant's or agent's file reference P005664WO CTH DAA				
ternational app	lication No.	International filing date (day/month/year)	(Earliest) Priority date (day/month/year)				
P	CT/IB99/01354	20 Jul	1999	21 Jul 1998				
tle of invention	Foodstuff							
Box No. II	APPLICANT(S)							
lame and addre	The address must incli	by given name; for a legal entity ade postal code and name of cou	, full official designation. intry.)	Telephone No.:				
Danisco A Langebro PO Box 1 DK-1001	gade 1	,		Facsimile No.:				
Denmark				Teleprinter No.:				
lame and addre SØE, Jø Oroaeng	ess: (Family name followed country.) rn Borch get 11 11 Mundelstrup		State (that is, country) of the country of the country) of the country of the cou	of residence: Denmark The address must include postal code and name of				
tate (that is, cou	ntry) of nationality: D	enmark	State (that is, country)	of residence: Denmark				
	ess: (Family name followed by country.) untry) of nationality:	given name; for a legal entity, fu	il official designation. Ti	he address must include postal code and name of				
State (that is, cou	intry) of nationality:		Citate (unat is, cosma),					
Further ap	plicants are indicated on a	continuation sheet.		-				

CL		NI -	_
่อก	eer	No.	_

International application No. PCT/IB99/01354

Box No. III AGENT OR COMMON REPRESENTATIVE; OR ADDRESS FOR	CORRESPONDENCE
The following person is 🚺 agent 🔲 common representative	
and $\overline{\mathbf{J}}$ has been appointed earlier and represents the applicant(s) also for international	preliminary examination.
is hereby appointed and any earlier appointment of (an) agent(s)/common repres	
is hereby appointed, specifically for the procedure before the International Prelim	
agent(s)/common representative appointed earlier.	
Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)	Telephone No.: 023 8063 4816
HARDING, Charles Thomas D Young & Co	Facsimile No.:
21 New Fetter Lane London	023 8022 4262
EC4A 1DA	
Jnited Kingdom	Teleprinter No.: 477667 YOUNGS G
Address for Correspondence: Mark this check-box where no agent or commor space above is used instead to indicate a special address to which corresponder	n representative is/has been appointed and the nce should be sent.
Box No. IV BASIS FOR INTERNATIONAL PRELIMINARY EXAMINATION	
Statement concerning amendments: *	
. The applicant wishes the international preliminary examination to start on the basis of:	
$oldsymbol{}$ the international application as originally filed	
the description as originally filed as amended under Article 34	
the claims as originally filed as amended under Article 19 (together with any accompanying as amended under Article 34	statement)
the drawings as originally filed as amended under Article 34	
The applicant wishes any amendment to the claims under Article 19 to be considered	d as reversed.
The applicant wishes the start of the international preliminary examination to be post the priority date unless the International Preliminary Examining Authority receives a or a notice from the applicant that he does not wish to make such amendments (Rule only where the time limit under Article 19 has not yet expired).	copy of any amendments made under Article 19
* Where no check-box is marked, international preliminary examination will start on the bas filed or, where a copy of amendments to the claims under Article 19 and/or amendments are received by the International Preliminary Examining Authority before it has begun to depreliminary examination report, as so amended.	of the international application under Article 34
anguage for the purposes of international preliminary examination:	
\mathbf{Y} which is the language in which the international application was filed.	
which is the language of a translation furnished for the purposes of international sea	rch.
which is the language of publication of the international application. which is the language of translation (to be) furnished for the purposes of international	al preliminary examination.
Box No. V ELECTION OF STATES	
The applicant hereby elects all eligible States (that is, all States which have been designated the PCT)	d and which are bound by Chapter II of
excluding the following States which the applicant wishes not to elect:	

Choot	NIO	3
Sheet	NO.	3

International application No. PCT/IB99/01354

	X NO. VI CHECK LIST					
referi	demand is accompanied by the following e red to in Box No. IV, for the purposes of int ination:	ements, in the le ernational prelir	For International Preliminary Examining Authority use only -			
1.	translation of international application	:	sheets		received	not received
2.	amendments under Article 34	:	sheets			
3.	copy (or, where required, translation) of amendments under Article 19	:	sheets			
4.	copy (or, where required, translation) of statement under Article 19	:	sheets			· 🗆
5.	letter	:	sheets			
6.	other (specify)	:	sheets			
The c	lemand is also accompanied by the item(s)	marked below:	:			
1.	√ fee calculation sheet			4.	statement explaining lack	of signature
2.	separate signed power of attorney			5.	nucleotide and or amino a computer readable form	icid sequence listing in
3.	copy of general power of attorney; reference number, if any:			6.	other (specify): Letter	
Next to	- HARDING	n signing and the o	capacity in w	vhich t	he person signs (if such capacity is n	ot obvious from reading the
1. [Pate of actual receipt of DEMAND:	iternational Pre	ilminary Ex	amın	ing Authority use only	
2.	Adjusted date of receipt of demand due to CORRECTIONS under Rule 60.1(b):					
3.	The date of receipt of the demand is A the priority date and item 4 or 5, below			топ		cant has been accordingly.
4.	The date of receipt of the demand is V	VITHIN the perio	od of 19 m	onths	from the priority date as extend	ed by virtue of Rule 80.5.
5.	Although the date of receipt of the den	nand is after the	e expiration	of 1	9 months from the priority date, t	he delay in arrival is
		For Inte	ernational E	Burea	u use only	
Dema	and received from IPEA on:					

From the: INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY To: HARDING, C. D. YOUNG & CO. WRITTEN OPINION 21 New Fetter Lane London EC4A 1DA GRANDE BRETAGNE ON (PCT Rule 66) -2 MAY 2000 Date of mailing 04.05.2000 (day/month/year) within 3 month(s) **REPLY DUE** Applicant's or agent's file reference from the above date of mailing P005664WOCTH Priority date (day/month/year) International filing date (day/month/year) International application No. 21/07/1998 20/07/1999 PCT/IB99/01354 International Patent Classification (IPC) or both national classification and IPC C12P7/64 Applicant DANISCO A/S et al. This written opinion is the first drawn up by this International Preliminary Examining Authority. This opinion contains indications relating to the following items: Basis of the opinion ١ 11 Non-establishment of opinion with regard to novelty, inventive step and industrial applicability 111 Lack of unity of invention IV Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement Certain document cited Certain defects in the international application VII Certain observations on the international application VIII 3. The applicant is hereby invited to reply to this opinion. See the time limit indicated above. The applicant may, before the expiration of that time limit, When? request this Authority to grant an extension, see Rule 66.2(d). By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3. How? For the form and the language of the amendments, see Rules 66.8 and 66.9. For an additional opportunity to submit amendments, see Rule 66.4. Also: For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4 bis. For an informal communication with the examiner, see Rule 66.6. If no reply is filed, the international preliminary examination report will be established on the basis of this opinion. The final date by which the international preliminary examination report must be established according to Rule 69.2 is: 21/11/2000.

Name and mailing address of the international preliminary examining authority:



European Patent Office D-80298 Munich

Tel. +49 89 2399 - 0 Tx: 523656 epmu d

Fax: +49 89 2399 - 4465

Authorized officer / Examiner

Romano-Götsch, R

Formalities officer (incl. extension of time limits)

DA ROCHA, O.

Telephone No. +49 89 2399 8101



l.	Basis	of the	opinion

I. This opinion has been drawn on the basis of (substitute sheets which have been turnished to the receiving in response to an invitation under Article 14 are referred to in this opinion as "originally filed".):						
	Des	cription, pages:				
	1-34		as originally filed			
	Clai	ms, No.:				
	1-29		as originally filed			
	Dra	wings, sheets:				
	1/2-	2/2	as originally filed			
2.	The	amendments hav	re resulted in the cancellation of:			
		the description,	pages:			
		the claims,	Nos.:			
		the drawings,	sheets:			
3.	This con	s opinion has beer sidered to go beyo	n established as if (some of) the amendments had not been made, since they have been ond the disclosure as filed (Rule 70.2(c)):			
4.	. Ada	litional observation	ns, if necessary:			
	i					
			of opinion with regard to novelty, inventive step and industrial applicability			
T 0	he qı r to b	iestions whether t e industrially appli	he claimed invention appears to be novel, to involve an inventive step (to be non-obvious) cable have not been and will not be examined in respect of:			
		the entire interna	ational application,			
	×	claims Nos. 1-12	2,25-29,			
b	ecau	se:				
		the said internat not require an in	ional application, or the said claims Nos. relate to the following subject matter which does Iternational preliminary examination (<i>specify</i>):			

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	the description, claims or drawings (indicate particular elements below) or said claims Nos. are so unclear that no meaningful opinion could be formed (specify):
	the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.
×	no international search report has been established for the said claims Nos. 1-12, 25-29.

- V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- 1. Statement

Novelty (N) Claims 13-24 (no) (1-12,25-29 no?)
Inventive step (IS) Claims 13-24 (no) (1-12, 25-29 no?)
Industrial applicability (IA) Claims 13-24 (yes) (1-12, 25-29 yes?)

2. Citations and explanations see separate sheet

VI. Certain documents cited

- Certain published documents (Rule 70.10)
 and / or
- Non-written disclosures (Rule 70.9)see separate sheet

VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted: see separate sheet

VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

- As already highlighted by the ISA, a complete preliminary opinion in respect to 111. novelty, inventive step and industrial applicability relative to the claimed matter 1-12, and 25-29 cannot be expressed by the IPEA in view of the fact that said claimed matter has not been searched (Rule 66.1(e) PCT).
- The following documents are referred to: V.

D1: US-A-5 695 802

D2: EP-A-0 652 289

D3: EP-A-0 445 692

D4: WO-A-91 06661

D5: EP-A-0 191 217

D6: EP-A-0 882 797

- The following documents seem to anticipate the novelty of claims 1-29 on file (Art. i. 33(2) PCT):
- D1-D3 disclose the enzymatic hydrolysis (via lipase strain) of vegetable or animal fat and the food products in which the fat obtained by said process is incorporated (see (see D1: columns 3-4 and Examples; D2: columns 2-4, claims 1,8-11; D3: p.2 lines 28-30 and claim 1). Thus, D1-D3 anticipate the novelty of claims 1-29.
- D4-D5 disclose a mixture of oil and mono- and diglycerides obtained by enzymatic hydrolysis or esterification (see D4 p. 2-3, D5 p.1-7). The enzyme is removed prior separation of the fatty acid by-products from the reaction mixture (see D4 p.2, lines 28-29; D5 p.7, lines 9-11). Thus, D4-D5 anticipate the novelty of claims 1-3, 5-9, 11-23, 25-29.
- Since the enzymatic hydrolysis of fat claimed in claims 1-29 does not appear to ii. provide any unexpected advantage over D1-D5, the claimed matter 1-29 does not appear to involve an inventive step (Art. 33(3) PCT. The applicant is invited to introduce any argumentation or evidence in support of an inventive step.
- VI. Document D6, published on 9.12.98 claiming a priority date of 4.06.97, discloses an enzymatic preparation process for triglycerides that appears to fall into the scope of claims 1-29 on file. At present, an investigation as to the right of priority of the present application has not been carried out.

VII.VIII.

The expressions conversion agent, functional ingredient, foodstuff and food material i.

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used throughout the description and the claims are obscure (Art. 6 PCT) and render the scope of the claims unclear. For example, there appears to be no distinction between foodstuff and food material. The basis in the description for any amendment should be indicated in the applicant's letter.

- ii. Claims 4-26 claim an *Invention*. Claims 4-26 are dependent on claims 1-3, which are, respectively, a use, a process and a product (foodstuff) type of claim. Apparently, the applicant attempts to group the three types of claim under the word *invention*. However, the term *invention* is obscure and leads to doubts as to the matter for which protection is sought (Art. 6 PCT).
- iii. In claims 27-29, the expression as hereinbefore described is regarded as a reference to the description, which is allowable only when absolutely necessary (Rule 6.2 a) PCT), which does not seem to be the present case.
- iv. In claim 7, 11, 19, 20, the 'invention' is performed with *derivatives* of the enzymes (in claim 7) or compounds therein listed.

 Similarly, in claim 9, the *mutants* of the micro-organisms therein listed are claimed to be effective in the performance of the invention. The term *derivatives* or *mutants* are open-ended formulations that leave open to interpretation what type of compound/enzyme/micro-organism, respectively, can be employed to perform the invention. In the present application, however, only the use of the compounds/enzymes/micro-organisms explicitly listed are disclosed in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art as required by Art.5 PCT.
- v. The Applicant is invited to clarify the difference between the claimed matter 13 (...generated from at least two constituents..) and 14 (...generated from a first constituent and a second constituent..).
- vi. In claim 15, which indirectly depends on claim 1, the first and second constituents are claimed to be *constituents of the foodstuff*. In claim 1 the constituent is claimed to be constituent of the food material. The applicant is invited to clarify.
- vii. According to claim 25, ...at least one functional ingredient comprises an emulsifier. Applicant's attention is directed to the fact the term 'comprise' seems not fully correct since one ingredient can only be one compound. The applicant is invited to replace

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the term 'comprise' with the term 'is' as supported by the description p. 15, line 16.

- viii. When amending the claims, the applicant is invited to simultaneously bring the description into conformity with the claims.
- To meet the requirements of Rule 5.1(a)ii PCT, the documents D1-D5 should be ix. identified in the description and the relevant background art disclosed therein should be briefly discussed.



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